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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,856	08/09/2001	Masahiko Yokota	1232-4755	3804

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EXAMINER	
LEE, CHEUKFAN	
ART UNIT	PAPER NUMBER

2622

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,856

Applicant(s)

YOKOTA ET AL.

Examiner

Cheukfan Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 10-17 is/are allowed.
6) ☒ Claim(s) 1 and 5-9 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. Claims 1 and 5-17 are pending. Claims 1 and 10 are independent.
2. Applicant's arguments with respect to claims 1 and 5-9 have been considered but are moot in view of the new ground(s) of rejection. The prior art Fujimoto et al. (U.S. Patent No. 6,259,082) applied in the rejections below was cited by Applicant in the Information Disclosure Statement filed September 8, 2003.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (U.S. Patent No. 6,259,082).

Regarding claim 1, Fujimoto et al. discloses an image sensor unit (Figs. 4 and 5, col. 7, line 1 – col. 8, line 12) comprising an illumination section including a light source (2) and a light guide (light leading member 10) to illuminate a document, an image sensing element (52) for converting an optical image of the document into an electrical signal, a cylindrical lens (51) for focusing the optical image on the image sensing element (52), a frame (housing 4) for integrally holding the illumination section (2), the

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image sensing element (52, and the lens (51), wherein a surface (10C) of the light guide (10) on the document (K) side, other than an irradiation part (10A), is inclined with respect to a lower surface (10B) of the light guide (10).

Regarding claim 6, a distance from the image-sensing element (52) to the surface of the light guide (10) on the document (K) side is shorter than a distance from the image-sensing element (52) to an end (upper end) of the lens (51) on the document (K) side (Fig. 5).

Regarding claim 7, the frame (4) is open; it does not cover the lens (51), and it does not cover the all surfaces of the light guide (10) either (Fig. 5, col. 7, lines 27-60).

Regarding claim 8, the image sensor unit (shown in Fig. 5) of Fujimoto is employed in the image reading apparatus, which further comprises a moving mechanism for reciprocating the image sensor unit in the subscanning direction of the apparatus while keeping the document (K) stationary on the document glass plate (70) (col. 7, lines 19-23).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claim 5 is rejected under 35 U.S.C. 103(s) as being unpatentable over Fujimoto et al. (U.S. Patent No. 6,259,082) in view of Endo (U.S. Patent No. 5,489,992).

Regarding claim 5, Fujimoto et al. discussed for claim 1 above does not disclose a second illumination section to pair with the illumination section discussed, which are so disposed as to sandwich the lens (51). However, such illumination section arrangement is not novel and is taught by Endo. The arrangement is for obtaining "a much higher degree of illumination" on the document being scanned (col. 5, lines 57-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a pair of illumination sections so disposed as to sandwich the lens in the image sensor unit of Fujimoto et al. to provide higher degree of illumination as taught by Endo.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (U.S. Patent No. 6,259,082) in view of Kao (U.S. Patent No. 6,563,611).

Regarding claim 9, which depends on claim 8, as discussed for claim 8 above, Fujimoto et al. discloses a document glass plate (70 in Fig. 5) for supporting the document (K) being scanned. Since in the embodiment of Fig. 5, the image-sensing unit is moved relative to the stationary document (K) in the subscanning direction during scanning, a support portion for supporting an end portion of the transparent or glass plate (70) is inherent in the apparatus of Fujimoto et al.

Fujimoto et al. does not explicitly disclose or show that part of the image-sensing unit is capable of being placed below the support portion of the apparatus.

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Kao discloses a scanner having an image information-reading device, which is a contact image sensor (27, 52) (col. 3, line 50). The image sensor (52) is moved in the subscanning direction under a transparent plate (55) on which a document is placed for scanning. Both ends of the transparent plate are supported by support portions of the scanner frame (51). As shown in Fig. 4, the image sensor (52) is capable of being placed below the support portion of the frame (51).

The image sensor of Fujimoto et al. is also a contact type image sensor, according to Fig. 5. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Fujimoto et al. and Kao to provide a support portion(s) supporting the end of the document glass (70) of Fujimoto et al. such that the image sensing unit is capable of being placed below the support portion, in order to provide a scanner or apparatus having a reduced vertical dimension.

8. Claims 10-17 are allowed.

9. The following is an examiner's statement of reasons for allowance:

Claim 10 and its dependent claims 11-17 were indicated allowed in the previous Office Action dated February 8, 2005. Reasons for allowance given in that Office Action are still valid after the updated search and are repeated below.

Independent claim 10 and its dependent claims 11-17 are allowable over the prior art of record, including Fujimoto et al., Kao and Endo applied above, because the

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prior art does not teach an image sensor unit having the combination of the claimed pair of illumination sections disposed to sandwich the lens, and the claimed light guides of the pair having exit ports formed such that a peak of exit light is farther than a focal position of the lens for the image sensing element with respect to the image sensing element, the focal position being included in a beam crossing region of exit beams from the pair of illumination sections.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogura et al. (U.S. Patent No. 6,295,141) discloses an image reading apparatus comprising a light guide having a surface at the document side inclined with respect to the bottom surface of the light guide (Figs. 1, 10, 14 and 15).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee
July 6, 2005



Cheukfan Lee